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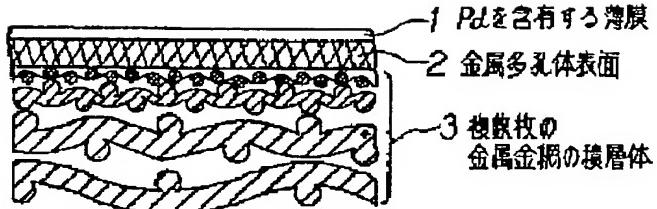
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TITLE : PRODUCTION OF HYDROGEN
SEPARATION MEMBRANE



ABSTRACT : PURPOSE: To obtain a hydrogen separation membrane having large hydrogen permeation amt. by drawing or blasting a metal porous body in the process of plating or ion plating on the surface of a thin film containing Pd of the metal porous body.

CONSTITUTION: A metal porous base body is produced by laminating and sintering a porous metal thin film 2 and plural numbers of metal nets 3 having small pores. The porous metal thin film 2 is obtd. by rolling and sintering a metal fiber nonwoven fabric having small fiber diameter (e.g. SUS 316L metal fiber nonwoven fabric having 2µm fiber diameter). The metal nets 3 are laminated in a various state according to the strength and dimension required to maintain the pressure-resistant strength. Then a thin film 1 containing Pd is formed on the surface of the porous metal thin film side by plating, ion plating, etc. In this process, the surface is subjected to drawing or blasting with metal in the stage that not all pores are sealed so that the pores not completely sealed is decreased in size. Then the thin film is treated by plating or ion plating till the thin film is completely sealed to obtain the hydrogen separation membrane.

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